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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,634	07/09/2003	Dennis Woojun Yang	N0110/PP/DA	1580
41729 7590 02/06/2007 PAVEL POGODIN, ESQ. 617 NORTH DELAWARE STREET SAN MATEO, CA 94401			EXAMINER WEI, ZHENG	
			ART UNIT 2192	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/616,634

Applicant(s)

YANG, DENNIS WOJUN

Examiner

Zheng Wei

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. This office action is in response to the application filed on 07/03/2003.
2. Claims 1-42 are pending and have been examined.

***Oath/Declaration***

3. The Office acknowledges receipt of a properly signed oath/declaration filed on July 09, 2003.

***Priority***

4. This application claims benefit of provisional application 60/473,239. Therefore, the priority date considered for this application is May 24, 2003.

***Information Disclosure Statement***

5. There is no information disclosure statement has been filed for this application.

***Drawings***

6. The drawings filed on July 09, 2003 are accepted by the Examiner.

***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 15-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**Claim 15:** Claim 15 claims a computer software, which is computer listings per se. It is neither computer component nor statutory process, as it is not “acts” being performed. Such claimed computer software does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program’s functionality to be realized. Therefore, claim 15 is non-statutory. – See MPEP 2106.01[R-5] “Computer-Related Nonstatutory Subject Matter”: *Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program’s functionality, as nonstatutory functional descriptive material.* --

**Claims 16-26:** Claims 16 - 26 are dependent claims of claim 15. These claims all fail to remedy the 35 USC 101 nonstatutory problem of claim 15. Therefore, they are all non-statutory.

**Claim 27:** Claim 27 claims a computer software, which is computer listings per se. It is neither computer component nor statutory process, as it is not "acts" being performed. Such claimed computer software does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. Therefore, claim 27 is non-statutory. – See MPEP 2106.01[R-5] "Computer-Related Nonstatutory Subject Matter": *Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material.* --

**Claim 28:** Claim 28 claims computer software, which is computer listings per se. It is neither computer component nor statutory process, as it is not "acts" being performed. Such claimed computer software does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. Therefore, claim 28 is non-statutory. – See MPEP 2106.01[R-5] "Computer-Related Nonstatutory Subject Matter": *Since a computer program is merely a set of instructions capable of being executed by a computer, the*

*computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. --*

**Claims 29-40:** Claims 29-40 claim "a computer system programmed for" which according to the specification (p.21, paragraph [056]) can be broadly interpreted as only computer software or combination of computer software/firmware. Such claimed computer software does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. Therefore, these claims are non-statutory. – See MPEP 2106.01[R-5] "Computer-Related Nonstatutory Subject Matter": *Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. --*

**Claims 41 and 42:** Claims 41-42 claim "a computer system" which according to the specification (p.21, paragraph [056]) can be broadly interpreted as only

computer software or combination of computer software/firmware. Such claimed computer software does not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. Therefore, these claims are non-statutory. – See MPEP 2106.01[R-5] "Computer-Related Nonstatutory Subject Matter": *Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. --*

### ***Claim Rejections - 35 USC § 102***

9. ° The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-11 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Halviatti (Halviatti et al., US 5,475,843)

Claim 1:

Halviatti discloses a method for providing a target application with an application programming interface, said target application comprising a graphical user interface (see for example, Fig.6, element 670 "Windows API" and related text), said method comprising generating a computer code (script) for activating (control) at least one element of said graphical user interface of said target application, wherein said activation of said at least one element causes said target application to execute a desired function (see for example, Fig.6, element 660, "Test Script" and related text, also see col.2, lines 35-37, "so that the script writer has complete control over the behavior and actions of the target application.").

Claim 2:

Halviatti further discloses the method of claim 1, wherein said generated computer code activates said at least one element of said graphical user interface of said target application by simulating at least one event of a windows system (see for example, Fig.6, element 640 and related text, also see col.2, lines 47-58, "Translated event message are forwarded to the Message Engine for matching with event handlers." and "Appropriate action, based upon use of the reserved work within the script, is then effected.")

Claim 3:

Halviatti also discloses the method of claim 1, wherein said generated computer code comprises at least one shadow object for activating said at least one element



of said graphical user interface (see for example, Fig.6, element 610 and related text, also see, col.3, lines 2-7; ATMs (shadow object) describe the actual component (object) which they represent in terms of Generic Element Models (Stored in GEMs Library). A GEM encapsulates the behavior of irreducible user interface elements such as push buttons, checkboxes, listboxes, and the like.”).

Claim 4:

Halviatti further discloses the method of claim 3, wherein said shadow object activates said at least one element of said graphical user interface by sequentially activating a predetermined plurality of windows (see for example, Fig.2, elements 250-280 and related text, also see, col.7, lines 4-12, “As shown in the second half of Fig.2, an event-driven architecture 250 eschews a pre-selected sequence.”).

Claim 5:

Halviatti also discloses the method of claim 1, further comprising requesting a user to select said at least one element of said graphical user interface of said target application (see for example, Fig.8A-C and related text and also see col.2, lines 66-67, “The system employs the Model Generator to decompose the application under test to generate the ATMS.”)

Claim 6:

Halviatti discloses the method of claim 1, further comprising selecting at least one window associated with said target application, wherein said selected window comprises said at least one element of said graphical user interface of said target application (see for example, Fig.8A-C and related text and also see col.2, line 66- col.3, line 13, "The system employs the Model Generator to decompose the application under test to generate the ATMS. Each ATM is a high-level for a specific component of the application being tested, such as a File Open dialog.").

Claim 7:

Halviatti discloses the method of claim 6, further comprising scanning said selected window for its window components (see for example, Fig.8A-C and related text and also see col.2, line 66- col.3, line 13, "The system employs the Model Generator to decompose the application under test to generate the ATMS. Each ATM is a high-level for a specific component of the application being tested, such as a File Open dialog.").

Claim 8:

Halviatti also discloses the method of claim 1, further comprising generating a second computer code (hook function or call back function) for a function causing said target application to execute a predetermined action, wherein said function comprises a call to said at least one shadow object (see for example. Col.11, lines 46-67, "callback function", also see example code of the function and related text)

Claim 9:

Halviatti discloses the method of claim 8, further comprising requesting a user to specify a signature (input data) of said function (see for example, col.15, example code of a callback function with input parameter).

Claim 10:

Halviatti further discloses the method of claim 9, wherein said specified signature of said function comprises a name of said function, an input data parameters of said function and an output data parameters of said function (see for example, col.15, example code of a callback function with input parameter "wParam", function name "DispatchCBTMessage" and output parameter which is a return value that the pointer points to).

Claim 11:

Halviatti also discloses the method of claim 8, further comprising requesting a user to specify a sequence of components of said graphical user interface of said target application that are required to be activated in order to cause said target application to execute said predetermined action (see for example Fig.2, "Modal Architecture" and related text, also see col.6, lines 50-67, "follows a fairly rigid sequence of operation with each input or entry mode demanding successful completion before the program proceeds to the next step.").

Claim 13:

Halviatti discloses a method for causing a target application to execute a function, said target application comprising a graphical user interface, said method comprising simulating an event of a windows system, said event activating an element of said graphical user interface of said target application, wherein said activation of said element causes said target application to execute said function (see for example, Fig.6, element 640 and related text, also see col.2, lines 47-58, "Translated event message are forwarded to the Message Engine for matching with event handlers." and "Appropriate action, based upon use of the reserved work within the script, is then effected.")

Claim 14:

Halviatti discloses a method for enabling first software application to control second software application, said second software application having a graphical user interface, said method comprising using said first software application to simulate an event of a windows system (see for example, Fig.6, element 640 and related text, also see col.2, lines 47-58, "Translated event message are forwarded to the Message Engine for matching with event handlers." and "Appropriate action, based upon use of the reserved work within the script, is then effected."), said simulated event activating an element of said graphical user interface of said

second application, wherein said activation of said element causes said second application to execute a desired function (see for example. Col.11, lines 46-67, "callback function", also see example code of the function and related text).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 15-25, 27-39 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halviatti (Halviatti et al., US 5,475,843)

**Claims 15-25:**

Claims 15-25 claim a computer software for providing a target application with an application programming interface, which is a product version that recites the same limitation of the method claims in claims 1-11 respectively, wherein all claimed limitations have been address and/or set forth above. Therefore, as the reference teaches all the limitation of claims 1-11, they also anticipate the claims 15-25.

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Claim 27:

Claim 27 claims a computer software for causing a target application to execute a function, which is a product version that recites the same limitation of the method claim in claim 13, wherein all claimed limitations have been address and/or set forth above. Therefore, as the reference teaches all the limitation of claim 13, they also anticipate the claim 27.

Claim 28:

Claim 28 claims a computer software for enabling first software application to control second software application, which recites the same limitation of the method claim in claim 14, wherein all claimed limitations have been address and/or set forth above. Therefore, as the reference teaches all the limitation of claim 14, they also anticipate the claim 28.

Claims 29-39:

Claims 29-39 claim a computer system programmed for providing a target application with an application programming interface, which is another product version that recites the same limitation of the method claims in claims 1-11 respectively, wherein all claimed limitations have been address and/or set forth

above. Therefore, as the reference teaches all the limitation of claims 1-11, they also anticipate the claims 29-39.

Claim 41:

Claim 41 claims a computer system for causing a target application to execute a function, which is a product version that recites the same limitation of the method claim in claim 13, wherein all claimed limitations have been address and/or set forth above. Therefore, as the reference teaches all the limitation of claim 13, they also anticipate the claim 41.

Claim 42:

Claim 42 claims a computer system for enabling a first software application to control a second software application, which is a product version that recites the same limitation of the method claim in claim 13, wherein all claimed limitations have been address and/or set forth above. Therefore, as the reference teaches all the limitation of claim 14, they also anticipate the claim 42.

13. Claims 12, 26 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halviatti (Halviatti et al., US 5,475,843) in view of the admitted art (APA) of paragraphs [004]-[006] of Applicant's Description of Related Art.

Claim 12:

Halviatti discloses the method of claim 1, but does not disclose wherein said provided application programming interface is capable of communicating in accordance with SOAP protocol. However, APA (see for example, [004]) discloses that SOAP is a well-known in the art lightweight messaging protocol that allows objects of any kind, on any platform, written in any language to cross-communicated. Therefore, It would have been obvious to one have ordinary skills in the art at the time the invention was made to use SOAP to communicate to Halviatti's API as pointed by Applicant.

Claims 26 and 40:

Claims 26 and 40 claim computer systems for enabling a first software application to control a second software application, which are other product versions that recite the same limitation of the method claim in claim 12, wherein all claimed limitations have been address and/or set forth above. Therefore, as the reference teaches all the limitation of claim 12, they also anticipate the claims 26 and 40.

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:



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- Okada et al., (US 5,956,029) discloses a user interface conversion method of converting a picture interface provided by an application program running on an operating system to generate and provide a new picture interface.
- Cypger et al., (US 5,556,295) discloses a method for extensible simulation system and graphical programming interface.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZW



TUAN DAM  
SUPERVISORY PATENT EXAMINER